

AMENDMENTS TO THE CLAIMS:

Please amend the claim 87 as follows.

1 – 86. (Cancelled)

87. (Currently Amended) A method comprising:

assigning ~~one or more~~ a plurality of segment IDs to ~~one or more~~ a plurality of channels associated with ~~one or more~~ a plurality of digitized segments of data;

determining a boundary number that represents ~~the number~~ a number of segment IDs to be aggregated into a first section and ~~the number~~ a number of corresponding digitized segments of data to be aggregated into a second section;

aggregating the determined boundary number of segment IDs into the first section, wherein the segment IDs share a destination node; and

aggregating the determined boundary number of digitized segments of data into the second section, wherein each aggregated digitized segment of data in the second section is associated with a segment ID in the first section.

88. (Previously Presented) The method of claim 87, wherein aggregating the determined boundary number of segment IDs into the first section comprises adding an inactive ID if the number of segment IDs that share a destination node are less than the boundary number.

89. (Previously Presented) The method of claim 87, wherein the boundary number is four.

90. (Previously Presented) The method of claim 87, further comprising combining the first section and the second section into a packet segment.

91. (Previously Presented) The method of claim 90, further comprising prepending a local area network (LAN) header to the packet segment to create a multi-channel packet; and transmitting the multi-channel packet over a local area network (LAN).

92. (Previously Presented) The method of claim 91, wherein the LAN is an Ethernet, and the LAN header is a media access control (MAC) header.

93. (Previously Presented) The method of claim 87, where one or more of the channels are fax channels, and one or more of the digitized segments of data represent fax data.

94. (Previously Presented) The method of claim 87, where one or more of the channels are voice channels, and one or more of the digitized segments of data represent voice data.

95. (Previously Presented) The method of claim 94, wherein one or more of the digitized segments of voice data include at least one sample of pulse-code modulated (PCM) voice data.

96. (Previously Presented) The method of claim 87, wherein one or more of the digitized segments of data are obtained from a time-division multiplexed (TDM) stream of data.

97. (Previously Presented) The method of claim 87, wherein one or more of the digitized segments of data are obtained from an asynchronous transfer multiplexed (ATM) stream of data.

98. (Previously Presented) The method of claim 87, wherein one or more of the digitized segments of data are obtained from a payload of an input packet.

99. (Previously Presented) The method of claim 98, wherein the input packet is an Real Time Protocol (RTP) packet.